



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Richard A. SCHUMACHER et al.

Serial No.: 10/622,833

Group Art Unit: Unassigned

Filed: July 21, 2003

Examiner: Unassigned

For: PHOSPHODIESTERASE 4 INHIBITORS, INCLUDING N-SUBSTITUTED ANILINE AND DIPHENYLAMINE ANALOGS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents
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Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

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- ☐ within three months of the filing date of a national application other than a CPA under § 1.53(d);
 - ☐ within three months of the actual filing date of the national phase of a PCT application; OR
 - ☒ before the mailing of a first substantive office action (including after filing of an RCE).
- ☐ Under 37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods specified in 37 C.F.R. § 1.97(b), but before the mailing date of:
- ☐ a final rejection under 37 C.F.R. 1.113;
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- ☐ the statement as specified in 37 C.F.R. § 1.97(e) set out below; OR
 - ☐ a check covering the fee of \$180.00 under 37 C.F.R. § 1.17(p).
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Statements Under 37 C.F.R. 1.97(e)

- ☐ Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application having a mailing date not more than three months prior to the filing date of this information disclosure statement; or
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Cited Materials

- ☐ Copies of materials listed but not attached were cited in benefit (35 U.S.C. § 120) ancestor application Serial No. _____, on Form 892 by the Examiner and/or Form 1449 by the applicant; see 37 C.F.R. § 1.98(d).
- ☐ Copies of materials listed but not attached were cited in an international search report dated _____.

☒ Copies of the materials listed are attached.

Non-English Language References

- ☐ An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).
- ☐ A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:

X = document of particular relevance when it is taken alone
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A = document defining the general state of the art
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P = intercalated document
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E = patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date
D = cited in the application
L = cited for another reason
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- ☐ Translation of other relevant information on foreign search report

Other Information


The instant application is related to copending patent applications Serial No. 10/051,309, filed January 22, 2002, Serial No. 10/361,634 filed February 11, 2003, Serial No. 10/754,600, filed January 12, 2004, Serial No. 10/662,117, filed July 18, 2003, and Serial No. 10/715,819, filed November 19, 2003. Enclosed are copies of documents cited in said related applications.

Payment of Fees Due (If Any):

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☒ The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,



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Attorney Docket No.: MEMORY-28

Date: March 12, 2004

BPH/rrt

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 5

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Application Number	10/622,833
Filing Date	July 21, 2003
First Named Inventor	Richard A. SCHUMACHER et al
Group Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	MEMORY-28

U.S. PATENT DOCUMENTS

Examine Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		5,622,977		Warrellow et al.	04/22/1997	
		5,633,257		Warrellow et al.	05/27/1997	
		5,679,696		Fenton et al.	10/21/1997	
		5,693,659		Head et al.	12/02/1997	
		5,698,711		Palfreyman	12/16/1997	
		5,710,160		Guay et al.	01/20/1998	
		5,710,170		Guay et al.	01/20/1998	
		5,712,298		Amschler	01/27/1998	
		5,723,460		Warrellow et al.	03/03/1998	
		5,728,712		Montana et al.	03/17/1998	
		5,739,144		Warrellow et al.	04/14/1998	
		5,776,958		Warrellow et al.	07/07/1998	
		5,780,477		Head et al.	07/14/1998	
		5,780,478		Alexander et al.	07/14/1998	
		5,786,354		Warrellow et al.	07/28/1998	
		5,798,373		Warrellow et al.	08/25/1998	
		5,840,724		Fenton et al.	11/24/1998	
		5,849,770		Head et al.	12/15/1998	
		5,859,034		Warrellow et al.	01/12/1999	
		5,891,896		Warrellow et al.	04/06/1999	
		5,866,593		Warrellow et al.	02/02/1999	
		5,919,937		Lynch et al.	07/06/1999	
		5,935,978		Fenton et al.	08/10/1999	
		5,962,483		Warrellow et al.	10/05/1999	
		5,962,492		Warrellow et al.	10/05/1999	
		6,077,854		Warrellow et al.	06/20/2000	
		5,814,651		Duplantier et al	09/29/1998	
		6,255,326		Ashton et al.	07/03/2001	
		6,096,768		Ashton et al.	08/01/2000	
		6,162,830		Connor et al.	12/19/2000	
		6,180,650		Frenette et al.	01/30/2001	
		6,200,993		Cote et al.	03/13/2001	

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		6,204,275		Friesen et al.	03/20/2001	
		6,245,774		Warrellow et al.	06/12/2001	
		6,297,264		Head et al.	10/02/2001	
	1	5,880,135			3/9/1999	
	2	6,262,040			7/17/2001	
	3	6,040,329			3/21/2000	

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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
		FR	2729142	A1	Nadler et al.	07/12/1996		
		EP	1116711	A2	Chassot et al	07/18/2001		
		EP	0994100	A1	Shinji et al.	04/19/2000		
		WIPO	00/71129	A1	Hunt et al	11/30/2000		
		WIPO	94/27971	A1	Nadler et al.	12/08/1994		
		WIPO	93/25517			12/23/1993		
		WIPO	94/14742			07/07/1994		
		WIPO	98/58901			12/30/1998		
		JP	11-189577			07/13/1999		
		WIPO	96/23754			08/08/1996		
		WIPO	99/33806		John et al.	07/1999		
		WIPO	96/36620		Giulio et al	11/1996		
		WO	00/64874			11/2/00		
		WO	01/70738			9/27/01		
		WO	94/02465			2/3/94		
		WO	95/01338			1/12/95		
		JP	2001 11047			1/16/2001		
		WO	02 059110		PCT	8/1/2002		
		WO	97 00868		PCT	1/9/1997		1
		WO	98 09961		PCT	3/12/1998		2
		WO	97 49702		PCT	12/31/1997		3
		WO	00 69841		PCT	11/23/2000		

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

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		HEILMAN et al, "Synthesis and Antiinflammatory Evaluation of Substituted Isophthalonitriles, Trimesonitriles, Benzonitriles, and Terephthalonitriles", Journal of Medicinal Chemistry, 1978, Vol. 21, No. 9, pp. 906-913, XP-002226236	
		WATANABE et al, "Structure-Activity Relationship and Rational Design of 3,4-Dephosphatase Inhibitors", Pergamon Tetrahedron, 2000, Vol. 56, pp. 741-752	
		INOUE et al, "Steric Tuning in Chiral Ligand Mediated Enantioselective Alkylation of Imines", Tetrahedron: Asymmetry, 1993, Vol. 4, No. 7, pp. 1603-1606, XP002226237	
		THOMAS C. MCKENZIE et al., "The Gomberg-Bachmann Reaction of Purines", <u>J. Heterocyclic Chem.</u> , May-Jun 1987, pp. 859-861, Vol. 24	
		VASU NAIR et al., "Novel, Stable Congeners of Antiretroviral Compound 2', 3'- Dideoxyadenosine," <u>J. Am. Chem. Soc.</u> , 1989, pp. 8502-8504, Vol. 111	
		VASU NAIR et al., "Synthesis Of Congeners Of Adenosine Resistant To Deamination By Adenosine Deaminase," <u>J. Chem. Soc Comm.</u> , 1989, pp. 878-879	
		JAMES L. KELLEY et al., "Synthesis and Structure- Activity Relationships of 2-Substituted-6-(dimethylamino)- 9-(4-methylbenzyl)-9H-purines with Antirhinovirus Activity," <u>J. Med. Chem.</u> , 1989, pp. 218-224, Vol. 32	
		JAMES E. KELLEY et al., "Antirhinovirus structure-activity relationships of 6-substituted-9-(4-methylbenzyl)-2-trifluoromethyl-9H-purines," <u>Eur. J. Med. Chem.</u> , 1990, pp. 131-135, Vol. 25	

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

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		ROGER J. SCHILLING et al., "A High-Throughput Assay For Cyclic Nucleotide Phosphodiesterases," <u>Analytical Biochemistry</u> , 1994, pp.154-158, Vol. 215	
		DONALD V. DANIELS et al., "A Semiautomated Method for the Assay of Cyclic Adenosine 5'-Monophosphate Phosphodiesterase," <u>Analytical Biochemistry</u> , 1996, pp. 367-369, Vol. 236	
		JEAN-JACQUES BOURGUIGNON et al., "9-Benzyladenines: Potent and Selective cAMP Phosphodiesterase Inhibitors," <u>J. Med. Chem.</u> , 1997, pp. 1768-1770, Vol. 40	
		JAMES L. KELLEY et al., "6-(Alkylamino)-9-alkylpurines. A New Class of Potential Antipsychotic Agents," <u>J. Med. Chem.</u> , 1997, pp. 3207-3216, Vol. 40	
		HIROYUKI SAWANISHI et al., "Selective Inhibitors of Cyclic AMP-Specific Phosphodiesterase: Heterocycle-Condensed Purines", <u>J. Med. Chem.</u> , 1997, pp. 3248-3253, Vol. 40	
		J.E. SOUNNES et al., "Proposal for Pharmacologically Distinct Conformers of PDE4 Cyclic AMP Phosphodiesterases", <u>Cell Signal</u> , 1997, pp. 227-236. Vol. 9, No. 3-4	
		MARY ELIZABETH BACH et al., "Age-related defects in spatial memory are correlated with defects in the late phase of hippocampal long term potentiation <i>in vitro</i> and are attenuated by drugs that enhance the cAMP signaling pathway", <u>Proc. Natl. Acad. Sci. USA</u> , April 1999, pp.5280-5285, Vol. 96	
		ELISABETH BOICHOT et al., "Anti-Inflammatory Activities of a New Series of Selective Phosphodiesterase 4 Inhibitors Derived from 9- Benzyladenine," <u>The Journal Of Pharmacology And Experimental Therapeutics</u> , 2000, pp. 647-653, Vol 292, No.2	
		Anil S. GURAM et al., "A Simple Catalytic Method for the conversion of Aryl Bromides to Arylamines," <u>Angew. Chem. Int. Ed. Engl.</u> , 1995, Vol. 34, No. 12, pp. 1348-1350.	
		Michael S. DRIVER et al., "A Second-Generation Catalyst for the Aryl Halide Amination: Mixed Secondary Amines from Aryl Halides and Primary Amines Catalyzed by (DPPF)PdCl ₂ ," <u>J. Am. Chem. Soc.</u> , 1996, Vol. 118, pp. 7217-7218.	
		Takashi EGAWA et al., "Rolipram and its Optical Isomers, Phosphodiesterase 4 Inhibitors, Attenuated the Scopalamine-Induced Impairments of Learning and Memory in Rats," <u>J. Pharmacol.</u> , Vol. 75, 275-281(1997).	
		Peng WANG et al., "Expression, Purification, and Characterization of Human cAMP-Specific Phosphodiesterase (PDE4) Subtypes A, B, C, and D," <u>Biochem. And Biophys. Research Comm.</u> , Vol. 234, 320-324 (1997).	

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		JAMES E. KELLEY et al., "Antirhinovirus structure-activity relationships of 6-substituted-9-(4-methylbenzyl)-2-trifluoromethyl-9H-purines," <u>Eur. J. Med. Chem.</u> , 1990, pp. 131-135, Vol. 25	
		Domine M. T. CHAN et al., "New N- abd O-Arylations with Phenylboronic Acids and Cupric Acetate," <u>Tetrahedron Letters</u> , Vol. 39, 2933-2936 (1998).	
		Mark BARAD et al., "Rolipram, a Type IV-Specific Phosphodiesterase Inhibitor Facillitates the Establishment of Long-lasting Long-term Potentiation and Improves Memory," <u>Proc. Natl. Acad. Sci.</u> , Vol. 95, pp. 15020-15025 (December 1998).	
		Miles D. HOUSLAY et al., "The Multienzyme PDE4 Cyclic Adenosine Monophosphate-Specific Phosphodiesterase Family: Intracellular Targeting, Regulation, and Selective Inhibition by Compounds Exerting Anti-inflammatory and Antidepressant Actions," <u>Advances in Pharmacology</u> , Vol. 44, pp. 225-342, 1998.	
		John HARTWIG et al., "Room-Temperature Palladium-Catalyzed Amination of Aryl Bromides and Chlorides and Extended Scope of Aromatic C-N Bond Formation with a Commercial Ligand," <u>J. Org. Chem.</u> , 1999, Vol. 64, pp. 5575-5580.	
		Han-Ting ZHANG et al., "Inhibition of Cyclic AMP Phosphodiesterase (PDE4) Reverses Memory Deficits Associated with NDMA Receptor Antagonism," <u>Neuropsychopharmacology</u> , 2000, Vol. 23, pp. 198-204.	
		Han-Ting ZHANG et al., "Effects of Rolipram on Scopolamine-induced Impairment of Working and Reference Memory in the Radial-arm Maze tests in Rats," <u>Psychopharmacology (Berl)</u> 2000 June;150(3):pp. 311-6.	
		T.W. Greene et al., <u>Protective Groups in Organic Synthesis</u> , 3 rd Edition, Chapter 3, "Protection for Phenols and Catechols," pp. 246-292, John Wiley & Sons, 1999	
		International Search Report from PCT Application No. PCT/US02/01508, dated January 16, 2003	

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